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It took years, but the failure of Northwest Bio's brain cancer vaccine is now in the open



By [Adam Feuerstein](#)²³ May 10, 2022



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A large, stylized graphic of the word "MARKETS" in a blocky, teal font. A thick, teal arrow points from the word "THE" in "THE READOUT" down to the letter "M" in "MARKETS". The background of the graphic is a dark teal color with a subtle grid pattern.

After years of delays and excuses, Northwest Biotherapeutics finally disclosed on Tuesday the final results from a late-stage clinical trial of its personalized cancer vaccine administered to patients with brain tumors. The treatment's data are as bad as expected — performing worse than a placebo.

Patients administered the Northwest Bio treatment, called DCVax, went a median 6.2 months without their brain tumors returning compared to a median of 7.6 months for patients offered a placebo.

Overall, patients treated with DCVax had a 10% higher risk of tumor progression compared to placebo — an outcome that is the antithesis of what's required from any effective cancer treatment.

DCVax is a cancer vaccine, meaning it's designed to stimulate the body's own immune system to find and kill cancer cells. Some immunotherapies have been shown to prolong survival despite minimal effect on tumor shrinkage. That wasn't the case with DCVax. The Northwest Bio study was also designed to measure and compare the overall survival of DCVax and placebo patients, but the company chose not to disclose those survival data on Tuesday — for reasons that are now clear.

The [Phase 3 study enrolled 331 patients](#)⁷ with newly diagnosed glioblastoma, an aggressive form of brain cancer. DCVax was administered to 232 patients; 99 patients received a placebo. The final data were presented at a cancer immunotherapy meeting sponsored by the New York Academy of Sciences.

[Nineteen months have passed](#)⁸ since Northwest Bio announced that the DCVax study had reached "data lock" — a standard step in the closure of a clinical trial that ordinarily leads quickly to data analysis and the announcement of the study outcome.

"We are excited to be so close to the finish line now, after such a long road," said Linda Powers, Northwest Bio's CEO, in an Oct. 5, 2020, press release.

Instead of acknowledging the futility of its brain tumor treatment, Northwest Bio used the long interregnum to concoct a false, alternative reality in which the study was successful and DCVax extended the lives of patients.

To do this, the company discarded the overall survival data from the 99 patients randomized to treatment with a placebo. Those original, prespecified data were thrown out, and replaced on a post-hoc basis with survival data collected from 1,366 patients who participated in five entirely separate and previously completed clinical trials.

When the 233 patients treated with DCVax were compared to the 1,366 patients taken from “external controls,” Northwest Bio said it found a 20% relative reduction in the risk of death. At the median, the DCVax patients lived for 19.3 months compared to 16.5 months for the make-believe group of control patients.

When you throw a dart against a wall first, and then paint a bullseye, it’s really easy to declare a win. It’s not, of course. It’s cheating. And that’s what Northwest Bio did with the analysis of its DCVax study.

Northwest Bio shares plunged 70% on Tuesday once the DCVax presentation concluded. After a brief rise to around \$2 per share in the run-up to Tuesday’s event, the stock is now trading again well below a buck.

No one was fooled.

About the Author



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